

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/772,617	01/30/2001	Jeffrey H. Banning	D/A03091312D	8348	
75	590 03/26/2002				
Patent Documentation Center			EXAMINER		
	Xerox Corporation			WRIGHT, SONYA N	
Xerox Square 2			widdin,	JONTAN	
100 Clinton Ave. S.			ART UNIT	PAPER NUMBER	
Rochester, NY 14644			1626		
			DATE MAILED: 03/26/2002		

Please find below and/or attached an Office communication concerning this application or proceeding.

		1: 1/->				
	Application No.					
Office Action Summers	09/772,617	BANNING ET AL.				
Office Action Summary	Examiner	Art Unit				
The MAN INC DATE of this commission on	Sonya Wright	1626				
The MAILING DATE of this communication app ars on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may a reply be within the statutory minimum of thirty (30) will apply and will expire SIX (6) MONTHS ficause the application to become ABANDO	e timely filed days will be considered timely. rom the mailing date of this communication. NED (35 U.S.C. § 133).				
Responsive to communication(s) filed on						
· · · · · · · · · · · · · · · · · · ·	is action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims		,				
4) Claim(s) 1-19 and 44-67 is/are pending in the	application.					
4a) Of the above claim(s) 10-19 and 44-66 is/are withdrawn from consideration.						
. 5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-9</u> is/are rejected.						
7) Claim(s) is/are objected to.	7) ☐ Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:	s have been received					
1. Certified copies of the priority documents have been received.						
 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage 						
application from the International Bu. * See the attached detailed Office action for a list	reau (PCT Rule 17.2(a)).	·				
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) ☐ The translation of the foreign language pro 15)☑ Acknowledgment is made of a claim for domesti						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Inform	nary (PTO-413) Paper No(s) nal Patent Application (PTO-152)				

Art Unit: 1626

DETAILED ACTION

- 1. Amendment and response filed by applicants in paper No. 6, dated Jan. 22, 2002 has been entered and considered carefully.
- 2. Based on the newly amended claim 1, the following new grounds of rejection was necessitated. Applicant's arguments with respect to claims 1-9 and newly added claim 67 have been considered but are moot in view of these necessitated new grounds of rejection.
- 3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 rejected under 35 U.S.C. 102(b) as being anticipated by Takeya CA 112 or Aida CA 111.

See RN 123764-97-6, RN 125811-49-6 or RN 125811-44-1.

Please note that all above compounds have n=17 as the instantly amended claim 1 and R1 is a chromophore.

Claims 1-4, 8, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujihira CA 105, see RN 103941-64-6.

Please note that the above compound has n=17 as the instantly amended claim 1 and R1 is a chromophore.



Art Unit: 1626

Claims 1, 2, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Johansson CA 106, see RN 65603-19-2.

Please note that the above compound has n=17 as the instantly amended claim 1 and R1 is a chromophore.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by West CA 116, RN 138337-12-9.

Please note that the above compound has n=17 as the instantly amended claim 1 and R1 is a chromophore.

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Ünit: 1626

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aida et al. CA 111 in view of Aida JP 63-316852.

Determination of the scope and content of the prior art (MPEP §2141.01)

Aide et al. CA or '852 disclosed generically the claimed compounds and a species anticipated the broad claims of the instant application as delineated supra.

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

Aide et al. CA disclosed all the features of the claims **except** the particular species differ from the specific dependent claims 6-7 in that the Z moiety of the RN 123764-97-6 is O and one of R7 or R8 is sulfonamide substituted while the instant claims 6-7 the Z moiety is N and one of R7 or R8 is hydroxy substituted.

Finding of prima facie obviousness---rational and motivation (MPEP §2142-2143)

Generically, Aide et al. Patent taught that Z is N and one of R7 or R8 is hydroxy substituted is an <u>optional</u> choice for such class of compounds. One having ordinary



Art Unit: 1626

skill in the art would expect any compounds generically disclosed by Aide to be operable for the same utility as Aide and the picking and choosing of some among many is prima facie obvious. In re Lemin 141 USPQ 814.

The following is a quotation of the second paragraph of 35 U.S.C. 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

In claim 1, line 4, after "the segment Z", "comprises" should be changed to –is selected from— for proper Markush language. Applicant is urged to see MPEP 2175.05(h).

Claim 3 recites the limitation "wherein the segment Z(CH2)nCH3 is NH(CH2)nCH3". There is insufficient antecedent basis for this limitation in the claim.

Claim 3 is dependent on claim 1. Claim 1 defines Z as comprising "one or more of C, O, N, and S". This definition of Z is broad and confusing.

Claim 4 recites the limitation "wherein the segment Z(CH2)nCH3 is CH3(CH2)n-N-(CH2)yCH3". There is insufficient antecedent basis for this limitation in the claim.

Claim 4 is dependent on claim 1. Claim 1 defines Z as comprising "one or more of C, O, N, and S". This definition of Z is broad and confusing.

The term chromophore is ambiguous because each chromophore is art specific. Were Applicant insisting that it is non-ambiguous, then all claims will be rejected over 102(a) RN: 215670-63-6. It is recommended that R1 be limited to subject matter in claims 6, 7, 8, and 9.

Art Unit: 1626

- 6. Claims 1, 3, and 4 are objected to because of the following informalities: Claims 1, 3, and 4 contain the term "the segment" which is confusing with regard to the definition of "Z". Appropriate correction is required.
- 7. Applicant's arguments filed 1/22/02 have been fully considered but they are not persuasive. Applicant's arguments with respect to te rejection of claims 1-5, 8, and 9 have been considered but are most in view of the new ground(s) of rejection.

Applicant argues that "the segment A", "comprises" should not be changed to "is selected from" for proper Markush language because the language in its present form describes the invention, and if modified as suggested by the Examiner would not adequately describe the invention. However, the term "comprises" is improper in compound claims because it renders the claim indefinite. Applicant is urged to see MPEP 2175.05(h).

Applicant disagrees with the Examiner's position that the term "the segment" is confusing with regard to the definition of "Z". Applicants argue that "Z" refers not only to atoms, but also to moieties that contain one or more of carbon atoms, oxygen atoms, nitrogen atoms, and/or sulfur atoms, and Applicant gives examples of "Z" which are found in the application. However, one of ordinary skill in the art cannot ascertain the metes and bounds (e.g. atoms and functional groups) of any "segment" in the invention.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Únit: 1626

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sonya Wright, whose telephone number is (703) 308-4539. The examiner can normally be reached on Monday-Friday from 8:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Joseph K. McKane, can be reached at (703) 308-4537. The Unofficial fax phone number for this Group is (703) 308-7922. The Official fax phone numbers for this Group are (703) 308-4556 or 305-3592.

When filing a FAX in Technology Center 1600, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communications with the PTO that are not for entry into the file of the application. This will expedite processing of your papers.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the

Art Unit: 1626

applicant and should be addressed to [joseph.mckane@uspto.gov]. All Internet e-mail communications will be made of record in the application file. PTO employees will not communicate with applicant via Internet e-mail where sensitive data will be exchanged or where there exists a possibility that sensitive data could be identified unless there is of record an express waiver of the confidentiality requirements under 35 U.S.C. 122 by the applicant. See the Interim Internet Usage Policy published by the Patent and Trademark Office Official Gazette on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist, whose telephone number is (703) 308-1235.

Celia Chang

Primary Examiner

Group 1600

Sonya Wright

March 22, 2002